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THIRD ANNUAL REPORT

Maryland State College of Agriculture

EXTENSION SERVICE

FOR THE

YEAR ENDING JUNE 30, 1917

MARYLAND STATE COLLEGE OF AGRICULTURE AND U. S. DEPARTMENT OF AGRICULTURE COOPERATING

Maryland State College of Agriculture
EXTENSION SERVICE

BOARD OF TRUSTEES

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Wm. C. Travers, Orchard Work.
*R. F. McHenry, Boys' Club Work.
W. D. Gray, Boys' Club Work.
*Stanley E. Day, Boys' Club Work.
*Eston F. Fox, Boys' Club Work.
*D. J. Howard, Boys' Club Work.
Gertrude Erickson, Home Economics.
F. W. Oldenburg, Agronomy.
H. W. Rickey, Poultry Husbandry.
George F. Jordan, Asst. Publicity and Correspondence Courses.
*B. W. Anspon, Home Gardens.

*COUNTY DEMONSTRATION AGENTS.

Allegany—John McGill, Jr.
Anne Arundel—H. C. Whiteford.
Baltimore—J. F. Hudson.
Calvert—John H. Drury.
Caroline—E. O. Anderson.
Carroll—Grover Kinzy.
Cecil—J. Harry Knode.
Charles—J. P. Burdette.
Dorchester—C. E. Leathers.
Frederick—P. A. Hauver.
Garrett—A. G. Middleton.
Harford—T. E. McLaughlin.
Howard—J. L. Fidler.
Kent—L. L. Burrell.
Montgomery—F. J. Van Hoesen.
Prince Georges—C. H. Taylor.
Queen Anne—O. C. Jones.
Somerset—C. Z. Kellar.
St. Mary's—G. F. Wathen, Jr.
Talbot—E. P. Walls.
Washington—Thomas L. Smith.
Wicomico—G. R. Cobb.
Worcester—E. I. Oswald.
Prince Georges—J. F. Armstrong (colored).
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*HOME DEMONSTRATION AGENTS.

Allegany—Mrs. Leona H. Powell.
Calvert—Miss Ruby F. Chamberlain.
Caroline—Mrs. Edith G. Norman.
Carroll—Miss Rachel Everett.
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Garrett—Miss Frances E. Gerber.
Harford—Miss Margaret Schmidt.
Howard—Mrs. Nell C. Lawson.
Allegany—Miss Anna P. Warren.
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Charles—Miss Leah D. Woodson (colored).
Eastern Shore—Miss E. E. Thomas (colored).
Prince Georges—Miss Lula L. Watkins (colored).
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Talbot—Mrs. Olive K. Walls.
Washington—Miss Adice S. Jones.
Wicomico—Miss Goldie E. Cook.
Worcester—Miss Lucy J. Walter.
Baltimore City—Miss A. C. Walton.
Baltimore City—Miss G. J. Ward.
Baltimore City—Mrs. F. B. Bennett.
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Montgomery—Miss Marie E. Montgomery (colored).

*In cooperation with U. S. Dept. of Agriculture.

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MARYLAND STATE COLLEGE OF AGRICULTURE AND U. S. DEPARTMENT OF AGRICULTURE COOPERATING

LETTERS OF TRANSMITTAL

DR. A. F. WOODS,
President:

I have the honor to submit herewith the Third Annual Report on the work of the Extension Service of the Maryland State College of Agriculture, in cooperation with the U. S. Department of Agriculture, for the fiscal year ending June 30th, 1917.

Respectfully submitted,

THOMAS B. SYMONS,
Director Extension Service.

College Park, Md.
January, 1918.

HON. S. M. SHOEMAKER,
Chairman, State Board of Agriculture:

In accordance with the requirements of the Act of Congress, Approved May 8th, 1914, and known as the Smith-Lever Act, I have the honor to transmit herewith, for submission to the Governor of the State, the Third Annual Report of the Extension Service, of the Maryland State College of Agriculture, in Cooperation with the U. S. Department of Agriculture, for the fiscal year ending June 30th, 1917.

Respectfully submitted,
A. F. WOODS, *President.*

College Park, Md.
January, 1918.

To His Excellency, EMERSON C. HARRINGTON,
Governor of Maryland:

I have the honor to transmit herewith the Third Annual Report of the Extension Service of the Maryland State College of Agriculture, in cooperation with the U. S. Department of Agriculture, submitted to me through the President of the College.

Respectfully submitted,

S. M. SHOEMAKER,
Chairman State Board of Agriculture.

Baltimore, Md.
January, 1918.

THIRD ANNUAL REPORT

OF THE

Maryland State College of Agriculture

EXTENSION SERVICE

FOR THE YEAR ENDING JUNE 30, 1917

By THOMAS B. SYMONS, *Director.*

Never in the history of this country had the Agricultural Industry been given the place it so rightfully deserved until the opening of the past season when the nation realized its dependence upon the American farmer for an adequate production of food products.

As a result of this awakening, every force was brought to bear upon aiding in the encouragement of greater production and more extended cultivation of farm crops, and the raising of live stock, to meet the increasing demands of the war.

The leadership of the U. S. Department of Agriculture and the State Colleges of Agriculture was at once recognized to guide the efforts of all forces thrust into the arena for increasing our agricultural output, and the Extension Divisions were the natural agencies of the Colleges through which the greater part of these efforts were carried to the farmers of the country.

The Extension Service of this Institution was no exception, and we were fortunate in having an organization in all Counties of the State, in cooperation with the U. S. Department of Agriculture, to carry out as successfully as possible all plans for meeting the National emergency.

It is believed that all forces in the Service arose to the occasion, and, as a result, we can feel satisfied that, within our means, every effort has been made to extend our influence and increase our efficiency in promoting all phases of production and conservation of agricultural products by extension and demonstration methods. The farmers of the State have responded enthusiastically to the call of the Nation, and spent every effort during the past season to increase the output of their farms.

The work of the Service can best be discussed under the general divisions of the work and approved projects.

ADMINISTRATION.

The enlargement of the work of the Service during the past year has greatly increased the administrative duties. The nature of the work makes necessary an extended organization to meet the conditions

in all parts of the State. The fact that Extension forces must come in contact with so many people under various conditions, increases the possibilities for administrative difficulties. Representatives of the Service must not only be capable and efficient, but must also serve agreeably and satisfactorily the constituencies of the several counties.

Relations with all divisions of the Institution have been most agreeable, and it is through the cooperation extended by all forces that the work of the Service has been so successful.

The transfer of the administration of the Farmers' Institute Work under this Service, beginning last fall, will greatly aid in the coordination of the work of the State. The relations with U. S. Department of Agriculture in the conduct of cooperative work have been agreeable, and a much better understanding between all forces in the prosecution of the Extension activities has been effected.

The completion of the reorganization plans under President Woods will stabilize the work and insure greater efficiency in the future.

Sources of Extension Revenue.

During the fiscal year ending June 20th, 1917, there has been available $24,202.34 from Federal Smith-Lever Fund; $14,202.34 from State Smith-Lever Fund; $20,400.00 from U. S. Department of Agriculture; $23,000.00 from the County Demonstration Fund; $5,000.00 from the State Fund for General Extension and Executive work; and about $2,000.00 from the State Horticultural Fund,—or a total of $88,804.68 that was devoted to Extension and Demonstration work.

During the present fiscal year ending June 30th, 1918, there is available $30,657.95 from Federal Smith-Lever Fund; $20,657.95 from State Smith-Lever Fund; $20,380.00 from U. S. Department of Agriculture; $23,000.00 from the County Demonstration Fund; $5,000.00 from the State Fund for General Extension and Executive Work; about $2,000.00 from the State Horticultural Fund; and $6,000.00 for Farmers' Institute Work,—or a total of $107,695.90 that is being devoted to Extension and Demonstration Work in the State.

In addition to the above, there is approximately $7,000.00 that is contributed by counties and other sources for aiding in the efficiency of County Agent work.

A detailed statement of expenditures and allotments of these funds will be appended to this report.

The State appropriation of $1,000.00 to each county, which has been available during the past year, has been of inestimable value to the State, as it permitted the inauguration of County Agent work in all the counties of Maryland. It is hoped that a similar provision will be made for Home Demonstration Agents in all the counties.

Office Accommodations, Equipment, Work, etc.

During the past year the Extension Service has been located in a leased building, about a mile from the College and close to the railroad station. This permitted bringing all specialists together and centralized the clerical and office force, which has greatly increased the efficiency of the Service. While much new equipment has been secured, including office furniture, slides, etc., yet, there is much that is needed by the Specialists and Agents. In fact, we have been able to procure practically no domonstration equipment for the Agents, and only a limited amount of office supplies. The Agents should be supplied with soil augers, testers, sprayers, etc., that would facilitate their work with the farmers.

Added equipment in the clerical office, such as typewriters, mimeograph, additional apparatus for the multigraph, etc., has greatly facilitated the handling of the enormous amount of mail and circular matter mailed from the office.

In this connection, I may add that it has been difficult to keep stenographic help. Owing to the great demand for clerical assistance by the Government, it has become necessary to increase salaries for this work, in order to keep a satisfactory force.

Miss Anna E. F. McCarthy, Chief Clerk, submits the following data, which gives some idea of the amount of clerical work conducted in the office:

Amount of paper used during year, multigraph, mimeograph (purchased by Smith-Lever money)	588,000 sheets
No. Stencils used for above period	1,140
No. Circular Letters issued	93
Mail Distributed Oct. 1, 1916, to Oct. 1, 1917—	
First-Class Letters	52,126
Mailed packages (bulletins, seeds, supplies, etc.)	6,434
Postal Cards	26,793
Miscellaneous Bulletins	27,000
Miscellaneous Publications	25,000
Dictated Letters, average per day	166

We are particularly glad that accommodations can be made for the Service in the new Agricultural Building, as it will bring our work in close touch with the other divisions of the College.

Changes in Personnel.

There have been several changes in the personnel of the Extension Service during the past year.

Mr. G. H. Alford, State Agent, resigned March 1st, 1917, to accept a position with the U. S. Department of Agriculture. F. B. Bomberger was appointed Assistant Director and Specialist in Rural Organization and Marketing, effective June 1st, 1917. Katharine A.

Pritchett, Home Demonstration Agent, severed her connection with the Service June 30th, 1917. Venia M. Kellar, Assistant in Home Economics Work was appointed Acting Home Demonstration Agent, effective July 1st, and later appointed State Agent. Reuben Brigham, Boys' Club Agent, resigned June 30th, 1917, to accept a position with the States Relations Service; Ralph McHenry was appointed Acting Boys' Club Agent, July 1st, 1917. W. B. Kemp, specialist in Agronomy, resigned September 15th, 1917, to take up other work. F. J. Oldenburg was appointed Extension Agronomist November 1st, 1917. H. W. Rickey was appointed Specialist in Poultry Husbandry, effective September 1st, 1917. Mr. George F. Jordan was appointed Assistant in Publicity July 15th, 1917. W. Dorsey Gray, Eston F. Fox, Stanley Day and D. J. Howard have been appointed assistants in Boys' Club Work, the last three under Emergency Funds.

Five new regular agents were appointed at the beginning of the season, as follows: John L. Fidler, A. G. Middleton, P. A. Hauver, Thomas L. Smith and Charles H. Taylor. R. L. Clute has been succeeded by J. P. Burdette in Charles County. E. O. Anderson succeeded A. J. Norman in Caroline County. Mr. Norman was killed accidentally by a live electric wire, which had been blown down by a terrific storm June 6th. Mr. Norman was a very efficient agent and the Service mourns his untimely end. County Agents John F. Monroe, W. C. Vail and G. B. Porter resigned from the Service November 30th, 1917. New appointments will shortly be made to these vacancies.

Edward Eaton, H. V. Shipley, Mordecai Ezekiel and Daniel B. Brooks have served as assistants to agents during part of the season.

A number of women agents were appointed regular and emergency workers during the summer months. These included Mrs. Susan F. Ward, Misses Adice S. Jones, Mildred Brady, Alma Merwin, Louise Holbrook, Elva Akin, Rhea Morgan, Annie L. Copper, Hettye I. Newman, Helen Erickson, Edna Marshall, Pearl Bernhardt; and the following colored women: Eslanda Smith, Bessie Murdock and Mrs. J. W. Shaw.

Miss Alice C. Walton and Miss Grace E. Reeves have been associated with the Service temporarily at headquarters. Recently Miss Gertrude Erickson has been appointed assistant at headquarters and Miss Walton transferred to Baltimore City.

Mr. J. F. Armstrong (colored) has been engaged during the past summer to work in the Southern Maryland counties. Additional colored agents will be appointed this winter.

While the administrative work has been exceptionally heavy during the past year, owing to the growth of the Service and Emergency work, yet, with the splendid cooperation of all forces in the Service as now organized, the difficulties of administration have been reduced to the minimum considering the field of activity.

The Assistant Director, Mr. F. B. Bomberger, has greatly aided in general administration work and supervision of agents since his appointment June 1st, 1917.

Printing and Distribution of Publications.

Limited funds have prevented the issuing of as many bulletins as we would desire. Four regular bulletins, "The Garden," "Federal Farm Loan Act and the Farmer," "Garden Record Book," "Spray Calendar," and "What Maryland's Farmer Boys and Girls Can Do to Help the Nation This Summer," with a total of 54,000 copies, have been issued by the Service. "The Farm Adviser," a bi-monthly publication was issued from July 1st to December 1st, with a total of 30,000 copies. This has been superseded by "Extension Notes," issued monthly, to give timely advice to farmers. A total of 25,000 copies of this publication has been distributed.

A special weekly press copy service for the press of the State has just been inaugurated. One column of plate matter has been furnished weekly to the press of the State accepting same. It is expected to discontinue the plate matter service, using the copy service in its place.

Twenty-one circulars, giving instructions upon various crop insect pests, etc., have been issued, with a total of about 25,000 copies. In addition, a large amount of bulletins, circulars and posters from the U. S. Department of Agriculture and the College and Experiment Station have been distributed through this office.

Special equipment for mailing matter has been installed to facilitate the work in the office. The publicity work is being more thoroughly organized.

County Demonstration Work.

This project provides for carrying out all demonstration work through men county agents. As stated previously, we were fortunate in being able to have an agent in every county during the past season. It is believed, on the whole, that we have an unusually strong force of agents. They have done splendid work during this pressing season. Much additional work has been thrust upon them. In several counties, where the work at first was not received enthusiastically by a large number of farmers, the sentiment has completely changed, and every encouragement is given the agents.

It is most difficult to secure men with training, experience and at the same time the other qualities that enable them to fit into the varying conditions presented in many of our counties. The County Agent's position under any circumstance is a difficult position to fill.

Regular demonstration work has been conducted in all counties, but the Emergency work in seed distribution, securing of farm labor and other important emergency matters forced the agents to change, or rather curtail their regular work.

The following summary of work conducted has been taken from the agents' reports:

CROP.	*No. Demonstrations.*	*Average Yield Per Acre.*	
Corn	235	69	Bushels
Wheat	158	26.7	"
Tobacco	47	1350	Pounds
Oats	14	40	Bushels
Rye	72	25	"
Buckwheat	9	19.2	"
Mixed Grasses	80	3	Tons
Soy Beans	117	Hay 2.42 Grain 13.3	" Bushels
Alfalfa	208	3.9	Tons
Crimson Clover	120	2	"
Red Clover	7	2	"
Cow Peas	119	(Hay) 2	"
Irish Potatoes	206	159	Bushels

ORCHARDS ..... 213 Instructed in the culture of 606,023 trees.

HORSES ..... 10 Pure bred stallions and 3 pure bred jacks. 14 mares were purchased through the influence of the County Agents

DAIRY CATTLE ..... 46 Pure bred bulls and 217 registered heifers were brought into the State as a result of the activities of the Agents.

BEEF CATTLE ..... 12 Pure bred bulls and 65 pure bred heifers have been brought in through the County Agents' influence.

HOGS ..... 177 Pure bred boars and gilts have been purchased by demonstrators.

SHEEP ..... 34 Pure bred rams and 50 registered ewes have been purchased as the result of the County Agents' influence.

POULTRY ..... 11,054 Chickens, 59 turkeys, 100 guineas and 200 geese have been cared for according to methods advocated by the County Agents.

LIVE STOCK DISEASES AND PESTS ..... 18,311 Head of live stock have been treated for diseases or pests at the suggestion of County Agents and Specialists.

FERTILIZERS ..... 214 Farmers compounded fertilizer and 91 farmers top dressed crops at the suggestion of the County Agents.

MANURE	1,043	Farmers carried out the suggestions of County Agents relative to the better care and handling of the manure. The agents helped to place 256 manure spreaders on demonstration farms.
SILOS	79	Silos were built under the direction of the County Agents.
LIME	992	Farmers have used lime under the direction of County Agents.
ORGANIZATION	162	Farmers' Organizations have been perfected by the County Agents during the year. Total membership, 12,685.

1.	Number of visits to farmers by county agents	17,959
2.	Number of miles traveled by county agents	200,937
3.	Calls on agents relative to work at office or home (Personal)	14,272
4.	Calls on agents relative to work (Telephone)	13,792
5.	Number of farmers' meetings held under auspices of agents	1,874
6.	Number of meetings addressed by county agents	2,410
7.	Total attendance at such meetings	148,148
8.	Number of field meetings held	465
9.	Total attendance at these meetings	8,053
10.	Number of official letters written	25,295
11.	Number of circular letters prepared and distributed	27,146
12.	Number of articles relating to work published	6,180
13.	Number of bulletins of the State and U. S. Department of Agriculture distributed	20,811

The Assistant Director summarizes his personal work as follows since June 1st, 1917:

Number of visits to county agents	34
Number of demonstration farms visited	44
Number of miles traveled	7,052
Number of letters dictated	675
Number of circular letters prepared	10
Meetings held	72
Addresses delivered	41
Attendance at meetings	12,783

The Director's summary is as follows:

Number of meetings attended	58
Number addresses delivered	26
Attendance at meetings	14,480
Number visits to agents	38
Number visits to counties	46
Number visits to demonstrators	25
Number miles traveled (approximately)	6,500

Negro Work.

The colored agents have done splendid work among the colored farmers on the Eastern Shore and also in Southern Maryland. While the summary of their work is included in the above totals, it may be stated that these agents have conducted 239 demonstrations in various crops, aided greatly in the prevention and control of hog cholera, organized several rural clubs, held community exhibits and secured the cooperation of the negroes in their territory to grow more and better crops, and to give better care to live stock. These agents also aided in the encouragement of canning, preserving and drying of fruits and vegetables among their people. It is planned to largely increase this work during the coming year.

Emergency Work.

Much additional work resulting from war conditions has been thrust upon the agents during the past year. A special report will be submitted discussing same. Briefly, the emergency work covers a general survey of labor and seed conditions in the State last spring. The distribution of about $20,000 worth of various seeds,—including potatoes, cowpeas, soybeans, etc., the distribution of farm labor during the summer months; a special survey of dairy conditions in the State last August; operation of public tractors; distribution of seed wheat; conducting a special milk cost survey for the week of November 26th to December 2nd; and giving aid to the Liberty Bond Campaign as well as other miscellaneous work to aid in the common cause.

Through the cooperation of the State Council of Defense, the work of the agents has been greatly facilitated by furnishing clerical help and some travel expense. It is hoped that permanent arrangements can be made to place the agents upon a travel expense account for which they can be reimbursed each month. At the present time the agents must pay their travel expenses, furnish supplies, etc., out of their salary. At least $500 should be allowed for travel accounts. It goes without saying that clerical assistance is most necessary to enable an agent to do efficient work.

I wish space would permit discussing the work of each agent by counties. I believe the work of some of our agents would be a model for the country.

The past season has demonstrated more and more the possibilities of County Agent Work and its effectiveness in aiding the farmer in his problems when guided by a trained, earnest and effective worker.

The following county agents are at work in the respective counties of the State during the year:

E. O. Anderson, Caroline County; L. L. Burrell, Kent County; J. P. Burdette, Charles County; John H. Drury, Calvert County; John L. Fidler, Howard County; P. A. Hauver, Frederick County; J. F. Hudson, Baltimore County; O. C. Jones, Queen Anne County; D. H.

Kauffman, Cecil County; C. Z. Keller, Somerset County; Grover Kinzy, Carroll County; John McGill, Jr., Allegany County; T. E. McLaughlin, Harford County; A. G. Middleton, Garrett County; J. F. Monroe, Worcester County; G. B. Porter, Dorchester County; Thomas L. Smith, Washington County; C. H. Taylor, Prince George County; W. C. Vail, Wicomico County; F. J. Van Hoesen, Montgomery County; E. P. Walls, Talbot County; G. F. Wathen, Jr., St. Mary's County; H. C. Whiteford, Anne Arundel County; L. H. Martin (colored), Local Agent, Princess Anne, Md.; James F. Armstrong (colored), Upper Marlboro, Md.

Home Demonstration and Girls' Club Work.

With the approach of spring only seven women agents were employed in the State. It has been difficult to have county authorities recognize the importance and provide part of the funds for this work.

The National demand for the greater production and conservation of foods and the organization of women in the State and counties

PHOTO BY BRIGHAM

No. 2.—CLUB GIRLS MAKING A FIRELESS COOKER.

placed a great burden upon this branch of the service. Immediate steps were taken to meet the emergency, and while the appropriation from the U. S. Government for this emergency work was not available until August 14th, by the first of July, Miss Venia M. Kellar, State Agent, organized the work and had an agent at work in 22 of

the 23 counties, and also in Baltimore City, Cumberland and Hagerstown. These agents worked in cooperation with the Women's County Defense Councils. In many cases the agents carried out the work of conducting demonstrations in canning, preserving and drying, planned by these committees in the counties. All forces worked together for results, and there is no doubt that never in the history of the State has so much foodstuff been canned, preserved, etc., for winter use.

Girls' Club Work.

Splendid results have been secured from the girls' club work during the past season. 1,458 girls have been enrolled in this work. The special campaign in promoting home gardens has greatly aided and

PHOTO BY BRIGHAM.

No. 1.—CANNING CLUB GIRLS AT WORK.

encouraged girls' work. The members of the girls' clubs in the State have canned, preserved, etc., 73,797 containers of fruit and vegetables. This large quantity is contrasted with 13,659 put up last year, or an increase of 439 per cent.

Warm cooperation with the school authorities in all counties has enabled our agents to use the rural schools as the center for social, demonstration and community work.

Urban Work.

The city work has been an entirely new feature this year. There has been an emergency agent in the cities of Cumberland and Hagerstown, and two in Baltimore City. The work has been very successful. Civic organizations have cooperated with the agents, and much good has resulted in arousing interest among the city people in home economics in general, and in the canning, preserving and drying of products.

A community kitchen has been started at Locust Point, a suburb of Baltimore. Assistance has been given in gardening, as well as in the conservation of products. Proper diets and the economical use of food have been emphasized.

Women's Work.

More than one thousand women have been organized into seventy-one clubs for definite home economics work during the past year. These clubs meet bi-weekly or monthly. This represents an increase of 318 per cent. over previous year's work.

Colored Work.

Home demonstration work among the colored people has been very successful. The principal work has been done in Baltimore and the Southern Maryland counties. The hearty response among the colored people has made it necessary to increase the force of agents in both the counties and city. We have been fortunate in securing trained colored workers, who have been able to impress the importance of this work upon their people.

Miss Venia M. Kellar, State Home Demonstration Agent, submits the following summary of the work by agents and specialists:

Summary of Agents' Work—

Number consultations held	2,953
Number circular letters sent	6,313
Number visits to demonstrators, homes, schools, clubs, etc	5,584
Number meetings held	2,417
Total estimated attendance	48,405
Number letters written	4,868
Number bulletins sent and delivered	11,699
Number miles traveled	54,565
Number girls enrolled in canning and poultry clubs	1,460
Number girls making demonstrations in cooking club products	244
Number girls carrying on bread demonstrations	341
Number caps and aprons made	788
Number dresses made, 92; number towels, 483; number holders, 421	996
Number miscellaneous articles made	702
Number containers canned and preserved by club members	127,744

Number women's clubs organized	71
Number women enrolled	1,036
Number Fireless Cookers made	274
Number Iceless Refrigerators made	10
Number houses screened by influence of agent	41
Number winter gardens	30
Number containers for fruit and vegetables, packed and stored by women doing emergency work	1,208,084

Summary of State Agent and Specialists—

Number meetings attended	194
Total estimated attendance	11,741
Number agents visited	76
Number demonstrations given	106
Number miles traveled	11,126
Number letters written	4,562
Number circular bulletins prepared	5

Boys' Club Work.

Mr. Reuben Brigham who developed this work from the beginning, resigned July 1st, 1917, to become associated with the Department of Agriculture. Mr. Ralph McHenry is now in charge of the work, under the guidance of the assistant director.

Boys' club work has been conducted in all counties of the State. It is an important phase of County Agent work. Oftentimes it is only through work with the boys and girls that agents can secure the cooperation of their parents. The success attending the Home State Tour, by which the successful club winners were carried by auto through all sections of the State last fall, aroused much enthusiasm in the work, and was a means of establishing a closer relationship with the county school authorities for promotion of the work.

County school superintendents have been consulted in each county and many local Boys' Agricultural Clubs formed with the teacher as an active cooperative force on whom the County Agent could depend. In all cases the Boys' Club Agent would assist in the organization and each secretary of the club was supplied with a minute book, constitution, directions for conducting a club meeting and suggestions for program on timely subjects related to the lines of club work in which the members were especially interested. A monthly letter is prepared for the signature of the County Agents offering suggestions for program based on a yearly outline. Supplementing this monthly letter are four instruction sheets, devoted to some phase each of corn, potatoes, pig and poultry growing. These instruction sheets are prepared from month to month by the specialists of the Extension Service for this especial purpose.

This program was followed very consistently by each local club, the object being to give each club member some definite and timely infor-

mation each month which would help him with his particular demonstration. The County Agents give instruction to the boys as to the practical application of the ideas and suggestions contained in the instruction sheets.

Mr. McHenry reports a steadily growing interest in club work in the State. He observes that club activities are having a direct bearing upon the lives of many of our boys. He points out that club work

No. 3.—SELECTING CORN, BOYS' CLUB WORK.

offers a diversion from the ordinary, monotonous routine of some farmers' sons' lives; it fills the need in the mind of a boy when he is at a critical period of his life, when an idle brain allows time for the formation of bad habits; it encourages boys to associate with each other and become interested in each others' problems; it develops

a spirit of team work, cooperation and pulling together for a common cause; it furnishes a medium for the outlet of enthusiasm and energy in boys; it furnishes a wholesome diversion from school activities; it gives them food for thought; it appeals to their interest; it develops mentality; it builds character; it makes for the future.

In expanding this important work the coming season care will be taken not to organize more clubs than our forces can properly take care of. During the past more work has been promoted than the County Agents could properly follow up.

No. 4.—BOYS' AGRICULTURAL CLUB.

Four field assistants have been added to this phase of our work through U. S. Emergency Funds, which will greatly facilitate assisting the County Agents regularly during the coming season.

Mr. McHenry submits the following summary for the boys' club work:

Number of boys enrolled in club work	1,213
Number club meetings held	880
Number club members present at meetings	17,600
Number club members completing demonstration and reporting results	502
Total value products grown by boys	$30,545
Average number bushels corn per acre	60.034
Average number bushels potatoes per acre	162.576
Average number pounds tobacco per acre (tobacco not stripped) estimated	1,400
Average number pounds daily gain per pig	1.13
Meetings attended by Boys' Club Agent	74
Conferences attended	105
Official letters	1,004
Total number instruction sheets, circular letters, etc	80,000

Highest Yields.

CORN (Per Acre) Name	Town	City	*Yield in Bus.*
G. Maguire Mattingly	Leonardtown	St. Mary's	99.8
Lantz Dayhoff	Smithsburg	Washington	98.7
Charles Merrick	Barclay	Queen Anne	93.88
H. Keller	Jefferson	Frederick	87.33
Andrew Shortall	Easton	Talbot	86.72
Charles Richardson	Bel Air	Harford	85.91
Oswald Grau	Long Green	Baltimore	85.00
Wesley Voshell	Preston	Caroline	80.19

(These yields were standardized to 12 per cent. moisture.)

POTATOES (⅛ Acre) Name	Town	City	*Yield in Bus.*
Harvey Bailey	Princess Anne	Somerset	55.00
Ellis R. Speicher	Accident	Garrett	44.3
Nelson M. Turner	Gambrills	Anne Arundel	39.00
James Hadaway	Rock Hall	Kent	37.60
Byron Coblentz	Middletown	Frederick	36.50
Thorntown Twigg	Cumberland	Allegany	35.91
William Lammers	Laurel	Prince George	31.74
Albert S. Hutzel	Boonsboro	Washington	30.5

Largest Pigs in Three Counties.			*Lbs.*
Walter W. Willison	Cumberland	Allegany	299
Raymond Stewart	Street	Harford	307
Milton Willis, Jr.	Easton	Talbot	247.5

Agronomy Extension Work.

Mr. W. B. Kemp served in capacity as specialist in agronomy during the past year, but resigned September 15th, 1917, to take up other work. An extended account of the plan of demonstration work in agronomy has been given in a previous report. War conditions made necessary that special emphasis be placed upon securing an increased production of farm crops. Special efforts have been made to locate stocks of good seed corn, soybeans and wheat.

The specialist has aided the County Agents in conducting definite demonstrations in field corn, sugar corn, wheat, soybeans, field beans, alfalfa, pastures, forage crops and tobacco.

In some communities of the State, particularly in Southern Maryland and in the mountain section, no one is growing high quality seed corn for sale. An effort has therefore been made to conduct very definite work, with at least one individual in these communities, who would raise good seed and thus be able to furnish it.

The large amount of sugar corn grown for canners in Maryland makes this a crop of great importance, and, since the canner generally

furnishes seed to all farmers who grow corn for his factory, the improvement in seed supply makes possible the improvement in corn on many farms. Special work was taken up with two large canners of sweet corn.

Soybeans as a crop for both hay and seed production, is assuming a position of such great importance that, in the effort to permit farmers in all sections of the State to become familiar with them at the earliest possible time, sixty bushels of the better varieties grown in the Experiment Station Farm were distributed through the County Agent to about as many farmers, in quantities varying from one-half to one and one-half bushels to the demonstration. The Agronomist of the Station greatly aided in this work. It is hoped that considerable seed has been saved from these demonstrations.

Special demonstrations for permanent pastures have been established. There is great need for improvement of permanent pastures on the steep hill land of western Maryland.

Most of the tobacco demonstrations took the form of plots for comparing yield and quality of the Maryland mammoth variety with native varieties; seed from the Station and U. S. Department of Agriculture was distributed to 32 demonstrators in the counties of Southern Maryland.

The specialist aided in the boys' corn club work. Mr. Kemp's work may be summarized as follows:

Number addresses delivered	54
Number movable schools	3
Number circulars prepared	14
Number letters written	630
Number exhibits judged	6
Number demonstrations visited	113
Number miles traveled (approximately)	6,000

Mr. F. W. Oldenburg has recently been appointed to carry on extension work in agronomy.

Animal Industry Extension Work.

The importance of this work is strikingly revealed with the present shortage of meat products throughout the country. There is a large opportunity in Maryland for the development of the live stock industry. Dr. S. S. Buckley, in charge of this project, has conducted a vigorous campaign in cooperation with the County Agents during the past season, for increasing our supply of meat. Live stock farming is extended much more gradually than other types of training, because of the need of greater capital, greater special knowledge and because of greater chances of financial loss. Chief among the possibilities of great financial loss are those accruing from the prevalence of contagious and infectious diseases, and this factor becomes, therefore, the most important in the propagation of live stock. The dis-

cases which have been the chief deterring factors in live stock development are Hog Cholera, Infectious Abortion, Tuberculosis, Leuco-Encephalitis and Parasitic infections.

Hog Cholera Work.

In order that these conditions should be modified as speedily and as effectively as possible, plans for educational and demonstrational hog cholera work were devised in cooperation with the Bureau of Animal Industry, U. S. Department. The U. S. Bureau of Animal Industry detailed a specialist, Dr. I. K. Atherton, to this Service to cooperate in the work.

The general plan of this work is the organization of local Hog Growers' Associations, with the initial purpose of saving hogs from exposure and loss from cholera by educational and demonstrational methods, and using these organizations for the general work of increased and improved hog production.

The work was begun in the spring and proved very successful and later enlarged by securing additional men from the U. S. Bureau of Animal Industry. The enlargement of the work to its present proportions was possible through funds provided by the live stock section of the State Board. In addition to this special work in selected districts, there has been a great amount of hog cholera work in various other sections of the State. It is believed that this work has greatly aided in reducing losses from this disease in the State. Moreover, the farmers have learned to adopt preventive methods to obviate as far as possible or circumscribe future outbreaks of the disease. Assistance has been given, as far as possible, towards the avoidance of loss from other communicable diseases of animals, through educational means by the specialist and agents, as this is an effective way to reach farmers.

In all cases where diseases have developed and where inspection and control methods were necessary the Live Stock Sanitary Section of the State Board has been advised.

Sheep Industry.

A special effort has been made to develop the sheep industry in the western part of the State. In Garrett County, sheep growers' associations have been formed, with a view of promoting the growing of sheep. Many meetings have been held for stimulating an interest in sheep and for arousing sentiment against the worthless dog, which is the greatest menace to the sheep industry at the present time.

Improvement of Breeds.

Much interest is being manifested in the improvement of breeds. An elaborate plan for stimulating interest and illustrating the merits and profits of improved live stock by local examples, has been worked

out, and it is hoped that finances will permit carrying it out. Demonstrations in showing the advantages of animals bred for special purposes and for special markets over those of the general purpose types are in progress.

Feeds and Management.

Permanent improvement of live stock rests fundamentally upon better knowledge and practice of feeding and management of animals. The specialist has feeding demonstrations in progress, in cooperation with the agents. The raising of forage crops for hogs, in order to save grain, etc., has received special attention in Southern Maryland, where the industry should be largely developed, and where the farmers need advice in more profitable feeding, housing, etc., as well as in the improvement of breeds. However, the emergency situation has demanded that activities be directed first towards saving what we have of live stock, and at the same time advocating provision for supplying the future, regardless of the measure of the question of breed and practice that would hold in normal times.

Dr Buckley has traveled by rail more than 6,172 miles, addressed 66 meetings, aided in movable school work, together with a large number of visits to farmers for purposes of giving advice. Dr. Atherton submits the following summary of hog cholera work conducted with Dr. Biles, Dr. Cass and Dr. Cole:

Number of meetings held	160
Number present at meetings	5,509
Number of vaccinations and post-mortem demonstrations	77
Number present at demonstrations	1,063
Number organizations formed	111
Total membership	1,908
Number bulletins, circulars, etc., distributed	8,204
Number farms visited to give instruction	482
Number persons given instruction other than at meetings	1,195
Number persons instructed to administer serum	700
Number miles traveled by specialists	20,595

HORTICULTURAL EXTENSION WORK.

Mr. S. B. Shaw, specialist in charge of this work, reports that due to the abnormal conditions existing last spring, requiring an increased production of staple and other food crops, especial attention was paid to the planting of truck crops as potatoes, encouragement of home gardens, etc. It was difficult to meet the demands for advice in the preparation and planting of gardens by city and suburban people, who desired aid in the production of vegetables for home use. Special emphasis was given to the rejuvenation of home orchards for production of clean fruit. The regular horticultural demonstration work has been continued in cooperation with the agents.

On account of the demand for seed of various kinds, including potatoes, beans, peas, etc., it was necessary for the Service to aid in supplying same through a special fund established by public-spirited citizens for the purpose. About $20,000 worth of seed was purchased in large quantities at wholesale, and distributed in small quantities to growers at cost. On account of the general status of the fruit industry and the demands in other directions, it was felt that Mr. Shaw could better devote his time to this work for the time being, rather than any other specialist.

He, accordingly, took care of the details in handling the seed work. It was a most difficult task, and as the seed was sold farmers on a time basis, many accounts are still unsettled.

Early in the season, a bulletin on "The Garden" was prepared and published. Circulars on potatoes, corn, onions and strawberries were prepared and issued, together with much other matter on horticultural subjects. During the past month Mr. Shaw aided materially in getting up an exhibit at the Southern States Exposition in New York City.

Mr. Shaw submits the following summary of field work:

Fruit growers' meetings attended	20
Orchards visited with County Agents	57
Orchard field demonstrations, other than above	60
Garden Club visits	7
Truck farms visited for advice	8
Visits to gardens	46
Permanent orchard demonstrations	18

Dairy Extension Work.

The dairy extension work is in charge of Mr. G. E. Wolcott, who also represents the Dairy Division of the U. S. Department of Agriculture.

The past year has been a most critical one for the dairy interests of this State. The high price of grain and increased cost of labor have greatly increased the cost of production. There has been much agitation among the dairymen, as well as distributors and consumers, regarding an equitable price for milk. Fortunately, the matters have been adjusted without serious interruption or difficulty.

The above conditions have emphasized the importance of this work as the Community Breeding Club, the Cowtesting Association, the Individual Herd Record, the growing of silage and legume hay, and help in the better production of milk, have brought encouragement and are being appreciated by the progressive dairymen of the State.

Cowtesting Associations.

Nine cowtesting associations are now being conducted in the State, with a total of 150 herds and 2,882 cows. The total number of associations could easily have been increased to twelve, but for the diffi-

culty in securing competent men to serve as testers. The first Maryland cowtesting association has been in operation since 1910. The following table shows the increased production from year to year:

Year	*Lbs. Milk*	*Lbs. Fat*	*Cost of Feed*	*Profit Over Feed*
1st	4,456	202	45.67	37.14
2nd	5,323	223	52.56	56.24
3rd	5,116	229	46.99	67.30
4th	5,572	224	55.73	72.73
5th	5,442	241	55.68	66.50
6th	5,512	237	58.23	69.39

The elimination of the low-producing cow is the factor which brings about the increased production for the first few years. Improvement due to individual feeding and use of the pure bred bulls will necessarily be less noticeable.

The first year of the Second Harford Association brought out some striking results. The following table shows the average production of the Association; also, the average of the high and low-producing herds:

	Lbs. Milk	*Lbs. Fat*	*Cost of Feed*	*Profit Over Feed*
Association Average	5,113	224	48.31	41.17
High Herd	8,559	366	77.07	86.85
Low Herd	3,715	167	42.01	21.64

The foregoing shows what can be accomplished through this work. This work is conducted in cooperation with the agents.

Herd Records.

Where possible dairymen are urged to keep herd records. As an illustration, in Allegany County, five dairymen were induced by the County Agent to keep records. The following table shows the herd averages for a year and the differences between the best and poorest cows:

Name of Dairymen	*No. of Cows*	*Lbs. Milk*	*Lbs. Fat*	*Lbs. Fat Best Cow*	*Lbs. Fat Poorest Cow*
A. T. McLuckie	38	6,149	245	444	93
L. Smith	14	6,985	244	454	123
W. H. Johnson	34	7,127	321	447	133
Perry Wilson	10	6,180	247	335	123
C. W. Lang		6,073	275	323	100

Cattle Purchased.

At Federalsburg and Cambridge cow clubs were organized for the purpose of purchasing a carload of grade Guernseys and a carload of Holsteins. The members of the club guaranteed the purchase price. The cows were sold at auction. The specialists have aided other communities in the selection of stock.

Miscellaneous Work.

Mr. Wolcott emphasizes the importance of bull associations. Seven daughters of Milky Way Masher of Wa Wa averaged 7,580 pounds of milk, 282 pounds of fat, while dams averaged 5,426 pounds of milk, 200 pounds of fat; other examples given show the advantage of extending the work.

The specialists in cooperation with agents have aided in building silos, demonstrating a wooden hoop silo constructed at a cost of $162.75. A boys' judging contest is conducted annually at the Frederick Fair. Mr. Wolcott has made 451 farm visits and delivered about 30 lectures on dairy subjects.

Mr. Wolcott rendered invaluable assistance to the Service, in its cooperation with other agencies, in conducting the Milk Cost Survey during the week of November 26th to December 2nd, 1917.

RURAL ORGANIZATION AND MARKETING.

During the past year Messrs. F. B. Bomberger and C. S. Richardson devoted part time to this work. June 1st, 1917, Mr. Bomberger became associated with the Service as Assistant Director and Specialist in Rural Organization and Marketing. Prior to June 1st Mr. Bomberger devoted as much time as possible to the organization of farmers in cooperation with the agents. Granges have been formed in the State, also farmers' clubs and other community organizations. In addition much follow-up work has been done by way of correspondence. By-Laws, Constitutions and plans of work for various organizations have been prepared in order that those already organized could be made more effective in their activities. This evolved much correspondence and traveling. Possibly the most successful single instance of rural organization is evidenced by the county-wide Sheep Growers' Association in Garrett County. This consists of a number of local sheep clubs at various points in the county, all of which are affiliated with the county-wide association.

In the field of marketing not much has been accomplished except in an indirect way. Rural organizations have been encouraged to buy and sell cooperatively, and on all occasions have been urged to standardize their products for marketing and label them in such a way as to win the confidence of the consuming public.

The Western Maryland Seed Potato Association, organized last year, has been given additional encouragement and forms of contract were provided for its members whereby a closer union of action could be guaranteed. It was hoped to develop the marketing work more vigorously, but funds for securing additional assistance have not been available. There is great need for rendering assistance in the marketing of farm products in this State. Mr. Bomberger has greatly aided in the formation of National Farm Loan Associations in several counties. He prepared a bulletin on the "Federal Farm Loan Act

and the Farmer''; also a bulletin on ''The Torrens System of Land Title Registration.'' Since June 1st Mr. Bomberger has greatly aided in general administrative work and supervision of the agents, and at the same time followed the work on organization.

A summary of Mr. Bomberger's activities is given under the County Demonstration project.

While Prof. C. S. Richardson is not officially connected with the Service at this time he has greatly aided the work of organization and developing community interest. During the spring he and the Director accompanied the Governor of the State on a tour of the State to arouse the farmers to the importance of greater food production. Throughout the year he has cheerfully aided the Service by meeting requests of County Agents and others for speaking engagements. During the past season Professor Richardson has made 48 addresses. The approximate attendance at the meetings being 12,000.

Poultry Extension Work.

Commencing with the present fiscal year provision was made for a specialist in Poultry Husbandry. Mr. H. W. Rickey was secured for this work, reporting for duty September 1st, 1917.

There are great possibilities for the development of this industry in the State. The work will be coordinated with the General Animal Industry Extension activities. Mr. Rickey has spent most of the time, up to the present, in visiting 18 counties, conferring with County Agents and learning conditions. He has secured eleven demonstrations in winter egg production, as every effort must be made to increase the production of eggs. It is believed that much can be accomplished in aiding the present meat supply by raising more poultry.

Entomological Extension Work.

Considerable work has been conducted along extension lines in the control of insect pests, by Mr. E. N. Cory, State Entomologist, and assistants who devote part time to this phase of insect control.

Spraying demonstrations have been given and many visits made to County Agents for purposes of advice on the control of various pests.

In the spring a special Spray Calendar was prepared by Mr. Cory and issued by the Service. A special effort has been made to reduce injury to staple crops by injurious insects. Instructions guarding against injury from the Hessian Fly to wheat have been issued, together with other timely information for growers. All correspondence pertaining to insect pests has been taken care of Mr. Cory. He has also greatly aided the Service in conducting the ''Maryland Week'' show and meetings, and recently in preparing and installing an agricultural exhibit at New York.

Bee Keepers.

Arrangements were made during the year to secure Mr. G. H. Cale, an expert in apiculture, to aid this industry in the State. He devoted part time to extension work. Every effort has been made to give assistance to bee keepers. A survey of the industry is in progress. Five field meetings have been held.

During this emergency it is especially desirable to increase the honey crop on account of the shortage of sugar. Financial aid from the State Council of Defense has enabled us to extend features of this work, as well as insect control.

Plant Disease Extension Work.

Mr. C. E. Temple, State Pathologist, is in charge and devotes part time to the work. Every effort has been made to reduce injury from disease. Special demonstration work with the agents has been conducted in controlling brown rot in peaches, blight on potatoes and tomatoes, as well as miscellaneous diseases of crops. There is a tremendous loss annually in the State from blight and wilt diseases on tomatoes.

An extended demonstration in spraying tomatoes and the use of resistant seed, evolving more than 70 acres of tomatoes, has been conducted in cooperation with the U. S. Department of Agriculture and the Experiment Station, in the region of Hurlock, Maryland, with very gratifying results. In one patch there was a difference in yield, between the wilt-resistant and commercial seed, of 196 per cent., in favor of the wilt-resistant plants. More than 50 pounds of wilt-resistant seed have been saved for next season's work.

As this State produces such a large quantity of tomatoes, its total pack approaching one-half the pack of the country, it is believed that every facility should be extended towards evolving a treatment and practice to prevent loss from blight and extending the use of wilt-resistant seed.

Special work has been conducted with the seed potato growers of Western Maryland, where a new industry is developing in producing seed potatoes for other parts of the State. Several spraying demonstrations have been conducted in Allegany and Garrett Counties for the control of blight on this crop. Professor Temple has aided in movable school work and in conducting pruning demonstrations when necessary. This work has been extended during the past summer through funds given by the Council of Defense.

Mr. W. C. Travers, who is primarily employed for inspection work, was able to conduct several demonstrations, in cooperation with the agents for the control of brown rot on peaches, which gave splendid results. Mr. Travers conducted these demonstrations in nine peach orchards located in different counties. The nine orchards contained

in all 31,000 peach trees; they produced 65,822 baskets of fruit; the cost of labor and spraying was $10,682.59; the net profit to the growers was $29,702.86.

Movable Schools.

There is a demand in some sections of the State for neighborhood short courses or movable schools. Owing to the fact that in the past the Farmers' Institute Work was not coordinated with the Service, it has been difficult to hold such schools without interfering to some extent with the Institute work. Accordingly, this work was not pushed, and only those sections that especially requested this character of work were taken care of. With the Institute work under the direction of the Service, both movable schools and institutes can be so arranged as to suit the communities, as well as the available force. The movable school serves to carry the college short courses in any particular subject to the farmer or the home-maker.

This work will be thoroughly organized for the coming winter. It is also hoped to arrange for the distribution of educational films through rural organizations.

Correspondence Courses.

On account of the delay in securing lessons for the correspondence courses the work has not progressed as was anticipated. It should be stated that all those who promised to furnish lessons in courses offered have been greatly crowded with their regular duties.

An effort is now being made to complete courses started and to conduct the work as vigorously as possible this winter.

Miscellaneous Work.

Much assistance has been given by men in the various divisions of the College and Station.

Prof. W. T. L. Taliaferro has greatly aided the Service by giving advice on farm management problems. He has made several visits to aid in judging at fairs and community exhibits. The Division of Engineering has assisted in drainage and rural engineering problems. A bulletin on "Electricity on the Farm," prepared by Mr. Creese, is ready for publication.

Prof. J. E. Metzger, of the Station, has assisted in the Agronomy Extension work, especially this fall, when the Service was without a specialist in this subject. Dr. A. G. McCall has also aided the Service in meeting many engagements.

Other representatives of the Station and College Departments have aided in emergency calls when their other duties would permit.

Landscape Gardening.

Prof. B. W. Anspon has greatly aided the Service in giving assistance to backyard gardens in Baltimore City during the past year. He has also aided in landscape extension work. Many schools and public institutions have been given instruction in proper plantings of grounds. A bulletin on this subject prepared by Mr. Anspon is now in press. There is a great demand for assistance and information for the improvement of home grounds, school grounds and municipal institutions.

Professor Anspon reports the following summary:

Visits made and advice given on landscape gardening	16
Plans made	12
Lectures given	18
Gardens inspected (Baltimore garden work) approximately	250
Judging at Flower Shows	4

County Exhibits.

On account of war conditions it was determined by the Council of the Maryland Agricultural Society to postpone the "Maryland Week" Agricultural Exhibition, which has been held annually in the Fifth Regiment Armory, Baltimore, Md., during November. The annual meetings of the Society and affiliated associations will be held in Baltimore, December 18th to 22nd.

In the place of the State exhibit it was felt that the educational features of the exhibition could better be continued at less cost and greater convenience to the people by the encouragement of local community shows in rural sections. Consequently, a small allotment of the Society's funds ($100) was made to each county to be offered as prizes for agricultural exhibits at community shows.

A wonderful response has been made to the suggestion. Communities which have never heretofore gotten together for any purpose have organized and held splendid displays of their agricultural products. As many as ten of these shows were held in a single county. The County Agents have aided in organizing the communities and the Service in furnishing speakers and demonstrators where possible.

Number local agricultural exhibitions held	60
Number exhibits	5,000
Attendance farmers and homemakers	30,000

The result of this work will be far-reaching, as hundreds of farmers have been induced to make exhibits and attend the shows who have never heretofore taken part in such public work.

The educational features have been emphasized in seed selection, what constitutes good varieties and grades of products. The mere fact of inducing a farmer to display his produce induces him to learn

how his neighbor won the award and gives him an opportunity to observe or have explained the reasoning of the judges' decision.

It is believed that the holding of these local shows will even serve a more useful purpose for the number or class of farmers they reach in demonstrating higher standards of products than the great "Maryland Week" Show. At any rate, on account of the conditions, the special encouragement given to community effort along this line will serve a most useful purpose in carrying out the aims of the State Societies and also the Extension Service in promoting greater production and a higher standard of agricultural products.

Conclusion.

The past year has been a most strenuous one for the members of the Service. Much additional work, resulting from war conditions, has been prosecuted. The emergency funds furnished through your office have been of inestimable value in aiding especially the women's and boys' club work.

The results of the past year's work have been most gratifying. Great credit is due the agents and specialists of the Service for their untiring efforts to do everything in their power to aid in the present emergency. There is a fine spirit of cooperation throughout the organization for earnest and effective work.

We approach the coming season with a determination to redouble our efforts in aiding the farmers of the State to meet the needs of the nation for increased production of food products.

FINANCIAL REPORT.

The Maryland Agricultural Extension Service

In account with

The United States Appropriation Under Smith-Lever Extension Act, 1916-1917.

Dr.	Smith-Lever Fund.
To receipts from the Treasurer of the United States, as per Appropriations for fiscal year ended June 30, 1917, under act of Congress approved May 8, 1914 (Smith-Lever Act).	$38,404.68

Cr.	Abstract.
By Salaries	$24,634.32
Labor	102.97
Publications	1,919.00
Stationery and small printing	944.25
Postage, telegraph, telephone, freight and express	425.78
Heat, light, water and power	19.00
Supplies	776.96
Library	86.01
Tools, machinery and appliances	933.23
Furniture and fixtures	1,562.55
Scientific apparatus and specimens	114.39
Traveling expenses	6,711.22
Contingent expenses	175.00
Total	$38,404.68

We, the undersigned, duly appointed Auditors of the Corporation, do hereby certify that we have examined the books and accounts of the Agricultural Extension Service for the fiscal year ending June 30, 1917; that we have found the same well kept and classified as above; that the receipts for the year from the Treasurer of the United States were $38,404.68 under the Act of Congress of May 8, 1914, and the corresponding disbursements $38,404.68; for all of which proper vouchers are on file and have been by us examined and found correct, leaving a balance of nothing.

And we further certify that the expenditures have been solely for the purposes set forth in the Act of Congress approved May 8, 1914, and in accordance with the terms of said Act.

(Signed) William Gillespie,
Deputy State Auditor.

ALLOTMENT OF FUNDS (EXCEPT THOSE FROM U. S. DEPARTMENT OF AGRICULTURE) USED FOR EXTENSION WORK FOR FISCAL YEAR ENDING JUNE 30, 1917.

PROJECTS.	Total.	Smith-Lever.		College.	State.
		Federal.	State.		
Administration	$6,813.91	$3,976.73	$1,987.18	$850.00	.....
Printing and Distribution of Publications	2,819.00	832.69	1,086.31	900.00	.....
County Agents (Men)	26,683.13	5,437.61	3,125.52	.....	$18,120.00
Home Economics and Girls' Clubs	7,199.95	3,566.66	3,633.29	.....	.....
Boys' Club Work	4,047.97	2,929.37	1,018.60	100.00	.....
Agronomy Extension	2,169.16	1,469.07	700.09	.....	.....
Animal Industry Extension	2,744.57	1,750.21	994.36	.....	.....
Dairy Extension	1,811.74	1,399.02	87.72	325.00	.....
Horticulture Extension	2,814.09	1,822.75	991.34	.....	.....
Negro Demonstration Work	1,326.23	1,018.23	308.00	.....	.....
Hog Cholera Demonstration Work	269.93	.....	269.93	.....	.....
Total Expenditures	$58,699.68	$24,202.34	$14,202.34	$2,175.00	$18,120.00

SUMMARY STATEMENT OF EXPENDITURES BY PROJECTS SHOWING CLASSIFICATION OF EXPENDITURES FROM ALL FUNDS (EXCEPT THOSE FROM THE FEDERAL DEPARTMENT OF AGRICULTURE), USED FOR EXTENSION WORK.

For Fiscal Year Ending June 30, 1917.

ITEMS OF EXPENSE.	Administration.	Printing and Distribution of Publications.	County Agents.	Boys' Club Work.	Home Economics and Girls' Club Work.	Agronomy.	Animal Industry Extension.	Dairy Extension.	Horticulture Extension.	Negro Demonstration Work.	Hog Cholera.	Total.
Salaries	$3,955.78	.....	$25,488.50	$2,420.64	$4,027.71	1,452.49	$2,263.65	$576.25	$2,046.85	$972.45	.....	$43,204.32
Labor	11.37	.....	8.75	11.40	57.85	.....	.....	7.40	.....	.....	$6.20	102.97
Printing and distribution of publications.	.....	$2,819.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,819.00
Stationery and Small Printing	259.87	.....	315.86	188.80	170.62	.....	12.50	5.44	11.16	.....	.....	964.25
Postage, Telegraph, Telephone, Freight and Express	287.84	.....	49.62	58.93	41.98	2.64	3.81	2.00	.20	.....	.....	447.02
Heat, Light, Water and Power	.50	.....	.....	.....	18.50	.....	.....	.....	.....	.....	.....	19.00
Supplies	370.63	.....	220.23	137.72	242.64	64.83	20.80	2.86	5.00	.....	.....	1,064.71
Library	31.31	.....	2.00	4.00	5.76	17.39	2.00	2.00	38.05	.....	.....	102.51
Tools, Machinery and Appliances	391.73	.....	.....	12.00	418.10	43.90	.....	67.50	.....	.....	.....	933.23
Furniture and Fixtures	1,072.82	.....	74.60	48.12	283.69	97.55	10.00	14.30	57.22	.....	.....	1,658.30
Scientific Apparatus	.....	.....	.....	23.04	26.00	96.61	27.50	.....	.....	.....	.....	173.15
Traveling Expenses	257.06	.....	523.57	1,143.32	1,907.10	393.75	404.31	1,133.99	655.61	353.78	263.73	7,036.22
Contingent Expenses	175.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	175.00
Totals	$6,813.91	$2,819.00	$26,683.13	$4,047.97	$7,199.95	$2,169.16	$2,744.57	$1,811.74	$2,814.09	$1,326.23	$269.93	$58,699.68

ONLY THE BULLETINS AND CIRCULARS NAMED BELOW ARE AVAILABLE FOR DISTRIBUTION.

These will be sent free of charge to any address upon application.

EXTENSION BULLETINS.

No. 1. Sept., 1916—Maryland Apple Grading and Packing Law, T. B. Symons and S. B. Shaw
" 2. Oct., 1916—The Relation of Lime to Agriculture.....L. B. Broughton
" 3. Feb., 1917—The Garden.....S. B. Shaw
" 4. May, 1917—Federal Farm Loan Act and the Farmer...F. B. Bomberger
" 5. May, 1917—Garden Record Book.....R. F. McHenry
" 6. June, 1917—What Maryland's Farmer Boys and Girls Can Do to Help the Nation This Summer.....Reuben Brigham
" 7. Aug., 1917—The Hessian Fly.....E. N. Cory
" 8. Dec., 1917—Insects and Rodents Injurious to Stored Products, E. N. Cory and H. S. McConnell
" 9. Dec., 1917—Electricity on the Farm.....Myron Creese
" 10. Mar., 1918—Improving the School Grounds.....B. W. Anspon

CIRCULARS

No.	Subject	
1.	Onions	S. B. Shaw
2.	Irish Potatoes	S. B. Shaw
3.	Field Beans	W. B. Kemp
4.	Strawberries	S. B. Shaw
5.	The Value of Milk As a Food	G. E. Wolcott
6.	Internal Parasites of Swine	S. S. Buckley and E. N. Cory
7.	External Parasites of Swine	S. S. Buckley and E. N. Cory
8.	Planning and Serving Meals	Venia M. Kellar
9. and 9a.	War Breads: Corn Meal Yeast, Oat Meal, Potato Yeast	Gertrude Erickson
10.	The Corn or Tobacco-Root Web-Worm	E. N. Cory
11.	Flea Beetles	E. N. Cory
12.	Honey Production	G. H. Cale
13.	The Melon Aphis	E. N. Cory
14.	Poison Sprays or Dust	E. N. Cory
15.	Oat Meal Bread, Corn Cake, Boston Brown Bread, Steamed Date Pudding, Lemon Sauce	Gertrude Erickson
16.	Feeding for Eggs in Winter	H. W. Rickey
17.	Corn Recipes	Venia M. Kellar
18.	Pickles	Venia M. Kellar
19.	Hog Pastures	S. S. Buckley
20.	Meat Substitutes	Gertrude Erickson
21.	The Feeding of Dairy Cows	G. E. Wolcott
22.	Thoughts for Cattle Breeders	S. S. Buckley
23.	Rations for Dairy Cows	G. E. Wolcott
24.	Alfalfa in Maryland	F. W. Oldenburg
25.	Lime in Maryland	F. W. Oldenburg
26.	Garden Seeds	S. B. Shaw
27.	Alfalfa in Maryland	F. W. Oldenburg
28.	Garden Fertilizers	S. B. Shaw
29.	Silos	G. E. Wolcott
30.	Planting Chart	S. B. Shaw
31.	Farm Animals in Maryland	S. S. Buckley
32.	Rules for Checking Up Expense and Value of Gardens	B. W. Anspon

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